

CLAIMS

What is claimed is:

- 1 1. A method for providing traffic information concerning one or more
2 specific sections of a route to a traveler, comprising the steps of:
3 generating a bundle of traffic advisory messages for the traveler when an
4 event relevant to the traffic situation has occurred in an affected section of the highway,
5 wherein each of the traffic advisory messages present in the bundle of traffic advisory
6 messages describes the traffic-relevant event in question at a different time within a
7 defined interval; and
8 selecting a relevant message from the bundle of traffic advisory messages
9 which is valid at a time relevant to the traveler.
- 1 2. The method for providing traffic information of claim 1, wherein said
2 step of selecting a relevant message is performed by the traveler.
- 1 3. The method for providing traffic information of claim 1, further
2 comprising the step of sending the bundle of traffic advisory messages to a terminal of
3 the traveler, wherein said step of selecting a relevant message is performed by the
4 terminal.
- 1 4. The method for providing traffic information of claim 1, wherein said
2 step of selecting comprises selecting, by a service provider, the relevant message from
3 the bundle of traffic advisory messages which is valid at a time relevant to the traveler.

1 5. The method for providing traffic information of claim 1, wherein
2 each of the traffic advisory messages includes an attribute "transit time", which indicates
3 the time which will be required to drive through the traffic event described by the
4 message.

1 6. The method for providing traffic information of claim 1, wherein the
2 bundle of traffic advisory messages further include a bundle of transit time matrix
3 information, the entries of these matrices indicating at least one of:

4 a travel time required to drive through the traffic event described by the
5 bundle of traffic advisory messages at the time stated in each of the traffic advisory
6 messages;

7 a travel time required to drive along the route in question from the starting
8 point to a first reported event,

9 a travel time between two reported events, and

10 a travel time between the last reported event and a destination of the
11 traveler.

1 7. The method for providing traffic information of claim 6, wherein the
2 bundle of transit time matrix information has a structure corresponding to that of the
3 bundles of traffic advisory messages, said method further comprising the step of
4 calculating travel times on routes as sums of the travel times on free-flowing sections
5 and the transit times through events.

1 8. The method for providing traffic information of claim 1, further
2 comprising the step of using, for the selection of the relevant time for the choice of the
3 relevant traffic message from the traffic message bundle, the access function $n(t) = i$ if:
4 $T_i - \frac{1}{2}\Delta t \leq t \leq T_i + \frac{1}{2}\Delta t$.

1 9. The method for providing traffic information of claim 1, wherein said
2 step of generating a bundle of traffic advisory messages includes generating traffic
3 message bundles with future validity times.

1 10. The method for providing traffic information of claim 9, wherein said
2 step of generating a bundle of traffic advisory messages includes providing the traffic
3 advisory messages having future validity times with a value characterizing the
4 probability of the prediction.

1 11. The method for providing traffic information of claim 1, wherein said
2 step of generating a bundle of traffic advisory messages includes generating traffic
3 message bundles with validity times in the past.

1 12. The method for providing traffic information of claim 1, wherein said
2 step of selecting comprises calculating linear distances and assumed speeds for certain
3 classes of roads to determine the time relevant to the traveler.

1 13. The method for providing traffic information of claim 1, wherein said
2 traffic advisory messages relate to an overall road network of a certain size.